

COMPUTER SYSTEM SECURITY VIA DYNAMIC ENCRYPTION

ABSTRACT OF THE DISCLOSURE

A dynamic computer system security method and system using dynamic
5 encryption and full synchronization between system nodes. A data record from a
data stream created by a source user is encrypted with an initial dynamic session
key. A new dynamic session key is generated based upon a previous dynamic
session key and a selected previously encrypted data record. The new dynamic
session key is then used to encrypt the next data record. A central authority is used
10 to synchronize and authenticate both source and destination users with dynamic
authentication keys. The central authority and users constantly regenerate new
dynamic authentication keys. A child process is forked to ensure synchronization and
authentication of dynamic authentication keys of each node upon a request for a
secure communication establishment from a user. The central authority generates
15 the initial dynamic session key with the current dynamic authentication key to begin a
secure communication session.